



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,763	07/15/2003	Masaru Takeuchi	116267	5999
25944	7590	01/24/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320				MOUTTET, BLAISE L
		ART UNIT		PAPER NUMBER
		2853		

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/618,763	TAKEUCHI, MASARU
	Examiner Blaise L Mouttet	Art Unit 2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 December 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4,6-13,16-18 and 21-31 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 4,6-9,12,13,16-18 and 21 is/are allowed.
- 6) Claim(s) 1,10,11,22-26 and 28-31 is/are rejected.
- 7) Claim(s) 27 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 December 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on December 21, 2004. These drawings are acceptable.

Claim Objections

2. The claim objections of the prior office action are withdrawn in light of the amendment of December 21, 2004.

Claim Rejections - 35 USC § 112

3. The prior 35 USC 112 2nd paragraph rejection is withdrawn in light of the amendment of December 21, 2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 11, 22-25, 28, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamata et al. EP 1 195 248 A1.

Kawamata et al. discloses, regarding claim 1, a serial recording apparatus (figure 1) comprising:

a feeding device (described in paragraph [0018]) including a feeding roller (24) and a drive source (feed motor) which rotates the feeding roller and thereby feeds a recording medium (12) in a feeding direction (A);

a recording head (any one of the printheads 22K-22Y as described in paragraph [0016]) which records an image on the recording medium (12) when the recording head is moved in a recording direction (B, C) substantially perpendicular to the feeding direction (A) (paragraph [0018]) and includes at least one array of recording elements (ink jet nozzles) arranged in a direction intersecting the recording direction (as understood in view of figure 5 and paragraph [0024] the nozzles are arranged in direction A);

a memory in which (a) first information representing a length of the array of recording elements in the feeding direction which length contains a manufacturing error of the array of recording elements (this information corresponds to the nozzle width value, used to calculate the amount of compensation in the algorithm of paragraph [0031]) and (b) second information representing a diameter of the feeding roller which diameter contains a manufacturing error of the feeding roller (this information corresponds to the theoretical feed value corresponding to the expected roller circumference = $\pi * \text{diameter}$, used to calculate the amount of compensation in the

algorithm of paragraph [0031]) is stored (although the word "memory" is not used, memory is a necessary component of the CPU that is taught and to perform the calculation of paragraph [0031] each of the variables used in the calculation are necessarily stored in a memory at least temporarily); and

a control device (a CPU as described in paragraphs [0031-0033]) which controls, based on the first and second information, an amount of operation of the drive source, and thereby controls an amount of feeding of the recording medium in the feeding direction (paragraph [0032]).

Regarding claim 11, the recording head is inkjet and the array of recording elements are an array of inkjet nozzles (paragraph [0016]).

Regarding claim 22, the first information corresponds the nozzle width in the feeding direction found as a result of measurement (paragraph [0031]).

Regarding claim 23, the designated value corresponds to the theoretical feed and the manufacturing error of the array of recording elements corresponds to the amount of compensation value calculated (paragraph [0031]).

Regarding claim 24, the second information corresponds to the actual feed value found as a result of measurement (paragraph [0031]).

Regarding claim 25, the designated value corresponds to the theoretical feed and the manufacturing error of the array of feeding roller corresponds to the amount of compensation value calculated (paragraph [0031]).

Regarding claim 28, the apparatus as described above carries out the method as described.

Regarding claim 30, the method is taught to run via a CPU necessitating computer instructions stored on computer readable media.

5. Claim 26, 29, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Askren et al. US 6,428,224 B1.

Askren et al. discloses, regarding claim 26, a serial recording apparatus (figure 1), comprising:

a feeding device (12) including a feeding roller (36) and a drive source (39) which rotates the feeding roller and thereby feeds a recording medium (32) in a feeding direction (column 4, lines 50-65);

a recording head which records an image on the recording medium (32) when the recording head is moved in a recording direction substantially perpendicular to the feeding direction and includes at least one array of recording elements arranged in a direction intersecting the recording direction (although not specifically labeled in figure 1, it is clear from the context of the description and column 1, lines 29-33 that a scanning inkjet printhead with an array of transducers perpendicular to the scan direction is used to perform the recording);

an information obtaining device (96) which obtains information representing a sort of the recording medium (column 12, line 57 – column 13, line 1); and

a control device (58) which controls, based on the sort of the recording medium, an amount of operation of the drive source (39), and thereby controls an amount of feeding of the recording medium in the feeding direction (column 13, lines 5-23).

Regarding claim 29, the apparatus as described above carries out the method as described.

Regarding claim 31, the method is taught to run via a control module 58 necessitating computer instructions stored on computer readable media.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata et al. EP 1 195 248 A1 in view of Martin US 4,097,873.

Kawamata et al. discloses the subject matter of claim 1 as described in the 35 USC 102 rejection above.

Kawamata et al. fails to disclose that the inkjet recording apparatus includes a recording mode selecting device which is operable to select one of a plurality of recording modes corresponding to different recording resolutions.

Martin teaches an inkjet recording apparatus including a recording mode selecting device (23) which is operable to select one of a plurality of recording modes corresponding to different recording resolutions (title, abstract, column 6, lines 11-54).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include a recording mode selecting device as taught by Martin to select

a recording mode corresponding to different resolutions in the apparatus of Kawamata et al.

The motivation for doing so would have been in order to balance printing speed and print quality depending upon the type of printing desired as taught by column 1, lines 29-44 of Martin.

Allowable Subject Matter

7. Claims 4, 6-9, 12, 13, 16-18, and 21 are allowable.

Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed December 21, 2004 have been fully considered but they are not persuasive as to the allowability of the rejected claims.

Applicant's arguments depend upon amended subject matter drawn to a memory that stores information "representing" parameters used by the recording medium feed control device to control an amount of feeding. The applicant alleges that the amended features are lacking from the applied EP '248 document. The examiner disagrees because it is clear that since a CPU is taught to employ such information as claimed in an algorithmic calculation then a memory of the CPU must at least temporarily store these parameters for the calculation to take place.

Applicant's new claims have also necessitated new rejections.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet who may be reached at telephone number (571) 272-2150. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

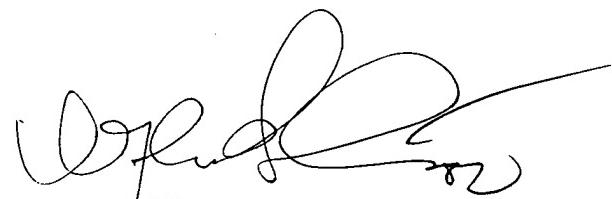
Art Unit: 2853

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, Art Unit 2853, can be reached at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet January 11, 2005

Blaise Mouttet 01/11/2005


LAMSON NGUYEN
PRIMARY EXAMINER
01/18/05